CLAIMS

1. A method for controlling a machine (10, 11, 12) to pick up an item (2) from a first position (3) and place the item in a second position (4a, 4b, 4c), wherein a sensor member (7)
5   provides data on said first position (3) to a control member (40), **characterised** by
-sending a message (61) from a master process of the control member (40) comprising one or more said first positions to all said machines (10, 11, 12) controlled by said control member,
10 -sending a message (62) from said control member to all said machines (10, 11, 12) with an indicator member specifying which of the one or more said first positions (3) shall be used.

2. A method according to claim 1, **characterised** by
15 -receiving a message (65) from a said machine (10, 11, 12) with a status that a said first position (3) has been used,
-sending a message comprising the said first position (3), or more said first positions, to all machines (10, 11, 12) controlled by the control member (40) in which message each
20 said first position is marked with a status of used or not.

3. A method according to claim 1 or 2, **characterised** by
-receiving at a said machine (10, 11, 12) the message comprising one or more said first positions,
25 -handling one of the one or more of said first positions,
-sending a message to the control member (40) comprising the information that a such said first position has been used.

4. A method according to claim 1, **characterised** by
30 -updating in said control member (40) the marker of the one said first position to read used, and
-sending from the control member (40) to all machines (10, 11, 12) a message that the status of the said first position consumed is equal to used.

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5. A method according to claim 1, **characterised** by a control member (40) selecting (73, 85) one or more specific said first positions to be handled by a specific machine (10, 11, 12).

5   6. A method according to claim 5, **characterised** in that the control member (40) uses a algorithm to select a said first position to be handled by one specific machine of all machines (10, 11, 12).

10   7. A method according to claim 5, **characterised** in that the control member (40) carries out a repeated triggering of a first position.

8. A method according to claim 1, **characterised** by

15   -registering said first position (3) of the item together with a unique identity member,
-marking each said first position with a status of used or not.

9. A method according to claim 8, **characterised** in that the

20   unique identity member takes the form of a number.

10. A method according to claim 9, **characterised** in that the unique identity member takes the form of an alphanumeric string.

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11. A method according to claim 1, **characterised** by allocating a said first position to a specific machine dependent on load balancing for a plurality of machines (10, 11, 12) controlled by the control member (40).

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12. A method according to claim 11, **characterised** by allocating a said first position to a specific machine dependent on load balancing for all of the machines controlled by the control member (40).

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13. A method according to claim 1, **characterised** by allocating a said first position to a specific machine dependent on a stoppage that has occurred in a work group controlled by the control member (40).

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14. A method according to claim 1, **characterised** by allocating a said first position to a specific machine dependent on the removal from service of another specific machine in the work group controlled by the control member (40).

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15. A system for controlling a machine to pick up an item from a first position and place the item in a second position, comprising a sensor member (7, 8), a plurality of machine members (10, 11, 12) to pick up an item (2) from a first

15 position (3) and place it in a second position (4a, 4b, 4c), and a control member (40) to control said plurality of machines (10, 11, 12), **characterised** in that the control member (40) is connected to at least one machine control member (41a, 41b, 41c) for one of said plurality of machines (10, 11, 12), which

20 control member (40) comprises a list of all said first positions.

16. A system according to claim 15, **characterised** in that the control member (40) comprises computer program elements to

25 change the status of a said first position on the list of all said first positions.

17. A system according to claim 15, **characterised** in that each of the at least one machine controller members (41a, 41b, 41c)

30 connected to the control member comprises computer program elements to change the status of a said first position on its list of all said first positions.

18. A system according to claim 17, **characterised** in that the

35 at least one machine controller member (41a, 41b, 41c)

comprises computer program elements to update the status of a said first position on its list of all said first positions on receipt of a message from the control member (40).

5   19. A system according to claim 18, **characterised** in that the at least one machine controller member (41a, 41b, 41c) comprises computer program elements to send a message to the control member (40) when a said first position has been handled.

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20. A system according to claim 15, **characterised** in that each first position of all said first positions on the list are recorded together with a unique identifier member.

15   21. A system according to claim 20, **characterised** by comprising a synchronisation member that provides a signal suitable for a any of the machines (10, 11, 12) to base a trigger action on.

22. A system according to claim 15, **characterised** in that at
20   least one said sensor member (7, 8) comprises a non-optical detector.

23. A system according to claim 15, **characterised** in that at least one said sensor member (7, 8) comprises a vision or
25   optical detection member.

24. A system according to claim 23, **characterised** in that the at least one said sensor member (7, 8) comprises a photocell.

30   25. A system according to claim 23, **characterised** in that the at least one said sensor member (7, 8) comprises a camera and an image processing member.

26. A system according to claim 25, **characterised** in that the image processing member comprises computer program elements arranged for image recognition.

5   27. A **computer program** comprising computer code means and/or software code portions which when loaded into a computer or processor will make the computer or processor perform the steps of a method according to any of claims 1-14.

10   28. A computer program product according to claim 27 comprised in one or more computer readable media.

29. A **computer data signal** for control and/or monitoring of a plurality of machines (10, 11, 12) arranged to move items from
15   a first place to a second place, embodied in a carrier wave, **characterised** by comprising a list of first positions (3) for a plurality of items (2).

30. A computer data signal according to claim 29, **characterised**
20   in that said computer data signal comprises markers to show if a given first position (3) has been consumed, handled, or not.

31. A computer data signal according to claim 30, **characterised** in that said computer data signal comprises at least one
25   indicator to which machine or pick and place machine shall handle a given first position (3).

32. A computer data signal according to claim 29, **characterised** in that said computer data signal is communicated in part by
30   means of any of the list of: half or full duplex TCP/IP, Ethernet, a fieldbus, Profibus, Modbus, CAN, FF or similar.

33. A computer data signal according to claim 29, **characterised** in that said computer data signal is communicated by a short

range wireless member according to a standard such as any of:
Bluetooth, WLAN, 11032.

34. A computer data signal according to claim 29, **characterised**
in that said computer data signal is communicated by means of a
short call-back procedure over an ordinary Public Switched
Telephone Network (PSTN), a wireless telephone system, a
privately switched network, cellular network or satellite based
telephone network.

35. **A graphical user interface** of a computing device for
controlling a machine (10, 11, 12) to pick up an item (2) from
a first position (3) and place the item in a second position
(4a, 4b, 4c) **characterised** by at least one representation
member for carrying out a method according to any of claims 1-
14.

36. A graphical user interface according to claim 35,
characterised in that the GUI comprises software object
representation members (108, 109, 110, 111) to configure any of
a plurality of machines (10, 11, 12) as any from the list of:
-a work group (108) for adaptive moving of objects (3) by the
machines (10, 11, 12);
-a Distribution (118, 119) of machines (10, 11, 12) arranged
according to identity of object handled;
-an Order in which the objects shall reach the machines (10,
11, 12) expressed as WorkAreas (110, 111);
-a load balancing group (132, 133, 134) in which loads are
balanced among any of the machines (10, 11, 12).

37. A graphical user interface according to claim 36,
characterised in that configurations are arranged so as to be
displayed and/or edited upon activation a part of the graphical
representation of one or more production areas comprising one
or more machines (10, 11, 12) by means of a computer mouse, a

keyboard, a keypad, touch screen, stylus or any other similar computer display selection means.

38. A graphical user interface according to any of claims 35-
37, **characterised** in that one or more machines (10, 11, 12) may be configured to pick up an object from a first position and place the object in a second position by means of carrying out a drag and drop operation on a software object representation member (110, 111).